



UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

081398.555

SERIAL NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NO.
---------------	-------------	-----------------------	---------------------

EXAMINER

ART UNIT	PAPER NUMBER
----------	--------------

17

DATE MAILED:

EXAMINER INTERVIEW SUMMARY RECORD

All participants (applicant, applicant's representative, PTO personnel):

(1) Colleen A. Beard (3) Patricia Patst
(2) Jeffrey E. Russell (4) _____

Date of interview August 25, 1997

Type: ☒ Telephonic ☐ Personal (copy is given to ☐ applicant ☐ applicant's representative).

Exhibit shown or demonstration conducted: ☐ Yes ☒ No. If yes, brief description: _____

Agreement ☐ was reached with respect to some or all of the claims in question. ☒ was not reached.

Claims discussed: All

Identification of prior art discussed: All

Description of the general nature of what was agreed to if an agreement was reached, or any other comments: Revised drawing

correction filed 7-21-1997 is approved. Applicant will submit proposed claims
requiring branched tetra- with multiple growth effecter molecules covalently
attached to each tetra. Examiner will enter amendment if and only if a
new search of this limitation does not show any art which teaches or suggests such a

(A fuller description, if necessary, and a copy of the amendments, if available, which the examiner agreed would render the claims allowable must be attached. Also, where no copy of the amendments which would render the claims allowable is available, a summary thereof must be attached.)

☒ It is not necessary for applicant to provide a separate record of the substance of the interview.

Unless the paragraph below has been checked to indicate to the contrary, A FORMAL WRITTEN RESPONSE TO THE LAST OFFICE ACTION IS NOT WAIVED AND MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW (e.g., items 1-7 on the reverse side of this form). If a response to the last Office action has already been filed, then applicant is given one month from this interview date to provide a statement of the substance of the interview.

- ☐ 2. Since the examiner's interview summary above (including any attachments) reflects a complete response to each of the objections, rejections and requirements that may be present in the last Office action, and since the claims are now allowable, this completed form is considered to fulfill the response requirements of the last Office action. Applicant is not relieved from providing a separate record of the substance of the interview unless box 1 above is also checked.

Jeffrey E. Russell
Examiner's Signature

Art Unit: 1811

1. The proposed amendment filed July 21, 1997 raises the following new issues:

The proposed amendment to page 1, line 19, could not be entered because "ingestible" was deleted in the previous amendment.

The proposed amendment to claims 1 and 13 inserting the limitation "water soluble" would have raised new issues under 35 U.S.C. 112, fourth paragraph, with respect to claims 7 and 23, which would merely have repeated the limitation. There was no instruction in the proposed amendment to cancel claims 7 and 23.

The proposed limitations stating that the cells do not bind to the tethers raises new issues requiring further consideration and search, and raises issues of new matter. No such limitation or similar limitation was previously claimed. Further, there is no literal support for the limitation in the specification, and Applicants have not demonstrated that this limitation is an inherent characteristic of the tethers recited at page 6, line 27 - page 7, line 2.

The proposed limitations stating that each tether is able to bind more than one growth effector molecule raises new issues requiring further consideration and search, and raises issues of new matter. No such limitation or similar limitation was previously claimed. Further, the original disclosure (see page 7, lines 3-9) requires that such tethers be branched tethers, but the limitation "branched" was not included in the proposed amendment.

The proposed limitation in claim 33 stating that no soluble growth effector molecules are added during the method raises new issues requiring further consideration and search. No such limitation or similar limitation was previously claimed.

Art Unit: 1811

2. Page 7, lines 3-6, of the response refers to a proposed change to Figure 2, but no such letter or proposed change were found with the response. Accordingly, the objection set forth in paragraph 1 of the final Office action is maintained.

3. The proposed amendments would have overcome the rejection under 35 U.S.C. 112, second paragraph, set forth in the final Office action with respect to antecedent basis for "the polymer" in claims 5, 6, 21, and 22 and would have overcome the rejection under 35 U.S.C. 112, fourth paragraph.

4. The rejection under 35 U.S.C. 112, second paragraph, set forth in the final Office action with respect to "enhance the rate of target cell growth" is maintained. In their response (see page 7, lines 11-14), Applicants argue that the term is defined in the specification, but give no citation for the definition. The only discussion of an enhanced rate of target cell growth that the examiner is able to find is in Example 1, and it is not clear how an example can constitute a definition of claim terminology. For example, the example is limited to rat hepatocytes, EGF, and star POE, but the claims are not so limited. How does the example then define what the claim terminology means? In the absence of a definition for the claim terminology, the prior art references can not be distinguished on the basis that they do not enhance the rate of target cell growth or on the basis that the mechanism of their enhanced rate of target cell growth is not the mechanism intended by Applicants.

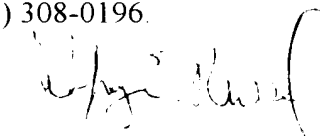
5. Concerning the European Patent Application '733, the polyethyleneimine would have been expected to be water-soluble because of the formation of cationic groups upon being brought into

Art Unit: 1811

contact with water (see page 3, line 58 - page 4, line 1). It should also be noted that Applicants' claims do not require the tethers to be "very" soluble in aqueous solution, do not require the tethers to extend to their full length, and do not require them to be flexible. Patentability must be based upon claimed, not unclaimed, differences over the prior art.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey E. Russel at telephone number (703) 308-3975. The examiner can normally be reached on Monday-Thursday from 8:30 A.M. to 6:00 P.M. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor Cecelia Tsang can be reached at (703) 308-0254. The fax number for Art Unit 1811 is (703) 305-3014 and the telephone number for the Group 180 receptionist is (703) 308-0196.



Jeffrey E. Russel

Primary Patent Examiner

Art Unit 1811

JRussel

August 15, 1997